# ChemRisk/Shonka Research Associates, Inc., Document Request Form

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T. Bennett / 1034A
*Requestor* *Document Center (is requested to provide the following document)*

*Date of request* 9/14/95 *Expected receipt of document* 10/14/95

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INTER-COMPANY CORRESPONDENCE

COMPANY Carbide and Carbon Chemicals Corporation LOCATION Post Office Box P Oak Ridge, Tennessee

TO Mr. W. G. Piper
LOCATION K-1034

DATE June 10, 1949

ANSWERING LETTER DATE

ATTENTION

COPY TO Messrs. R. G. Jordan
W. C. Moore
J. P. Murray
G. W. Sell
N. H. Van Wie
R. S. Ware
File

SUBJECT K-312 Purge Capacity

Code Number: KP-66



In accordance with your request, a study has been made of the purge capacities of buildings K-312-1 and K-312-2, for use in connection with considerations of K-31 design. It was found that an additional 1,200 scfd light contaminant upflow from K-31 could be purged from the cascade by buildings K-312-1 and K-312-2, without starting building K-312-3. No major change in the operation of K-312-1 or K-312-2 would be necessary, although it might prove desirable to move the side purge from its present location in K-305-12 to K-304-5 in order to distribute more equally the amount of work done by the side and top purge buildings. The cascade tops purge would in this case amount to approximately 2,200 scfd, and the side purge to a maximum of 4,500 scfd. It would probably not be necessary or desirable to increase the frequency of the power to K-312 section pumps above the present 35 cycles except to dispose of heavy slugs of light contaminants. The components of the cascade purge as developed in this study are tabulated as follows:

| | Light Contaminant Upflow | Total Purge |
|---|---|---|
| Present K-25 - K-27 Average | 3250 scfd | |
| Extra capacity to allow for slugs, etc. | 1500 | 4750 scfd |
| Upflow from K-29 | 750 | 5500 |
| Upflow from K-31 | 1200 | 6700 |

R V Maier

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